FIG.1

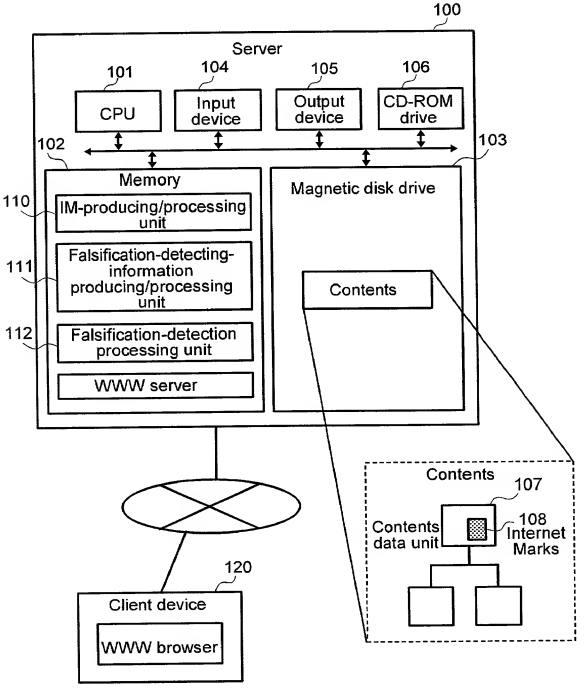

100
Server
101
104
105
106
CPU
Input device
Output device
CD-ROM drive
102
103
Memory
Magnetic disk drive
110
IM-producing/processing unit
111
Falsification-detecting-information producing/processing unit
Contents
112
Falsification-detection processing unit
WWW server
Contents
107
Contents data unit
108
Internet Marks
120
Client device
WWW browser

FIG2

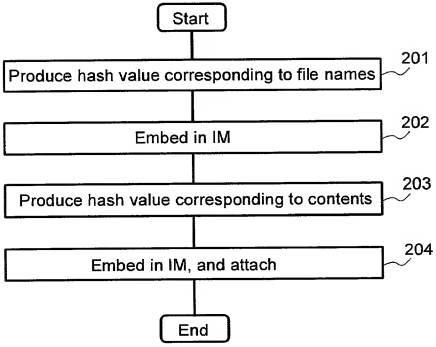

Start
Produce hash value corresponding to file names
201
Embed in IM
202
Produce hash value corresponding to contents
203
Embed in IM, and attach
204
End

FIG3

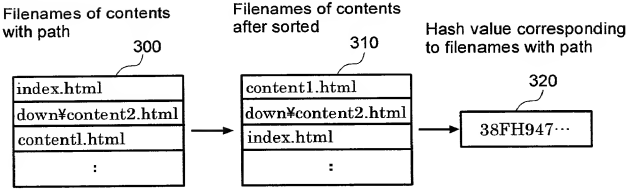

Filenames of contents with path
300
index.html
down¥content2.html
content1.html
:
Filenames of contents after sorted
310
content1.html
down¥content2.html
index.html
:
Hash value corresponding to filenames with path
320
38FH947···

FIG.4

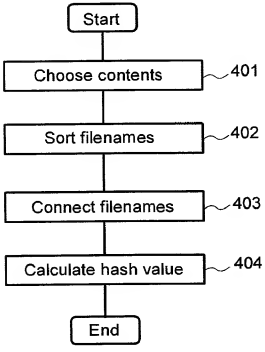

Start
Choose contents
401
Sort filenames
402
Connect filenames
403
Calculate hash value
404
End

FIG.5

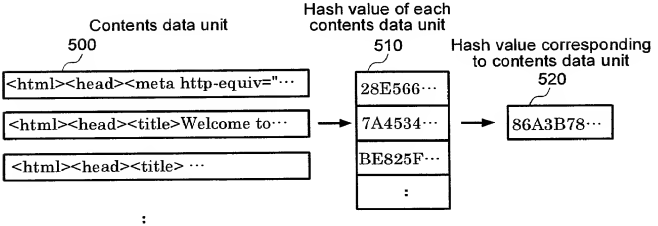

Contents data unit
500
Hash value of each contents data unit
510
Hash value corresponding to contents data unit
520
<html><head><meta http-equiv="···
<html><head><title>Welcome to···
<html><head><title> ···
28E566···
7A4534···
BE825F···
86A3B78···

FIG.6

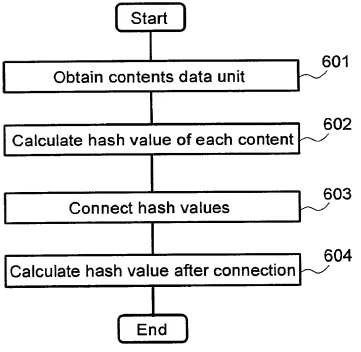

Start
Obtain contents data unit
601
Calculate hash value of each content
602
Connect hash values
603
Calculate hash value after connection
604
End

FIG.7

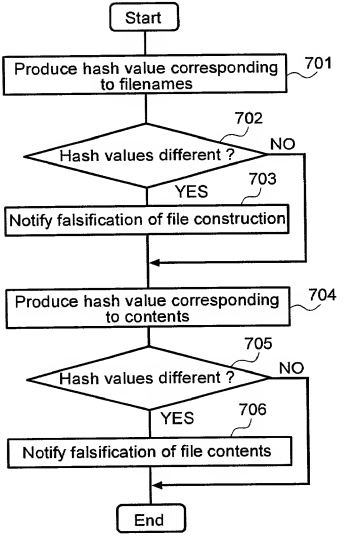

Start
Produce hash value corresponding to filenames
701
702
Hash values different ?
NO
YES
703
Notify falsification of file construction
Produce hash value corresponding to contents
704
705
Hash values different ?
NO
YES
706
Notify falsification of file contents
End

FIG.8

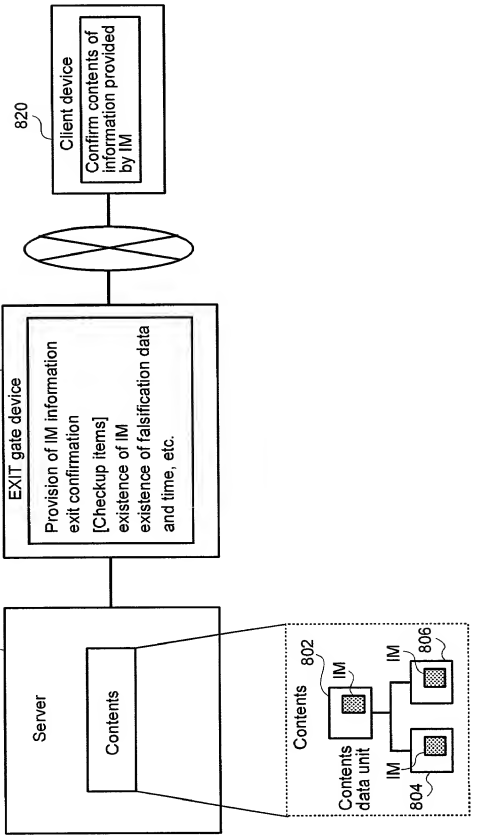

800
Server
Contents
810
EXIT gate device
Provision of IM information
exit confirmation
[Checkup items]
existence of IM
existence of falsification data
and time, etc.
820
Client device
Confirm contents of information provided by IM
Contents
802
IM
806
IM
Contents data unit
IM
804

FIG.9

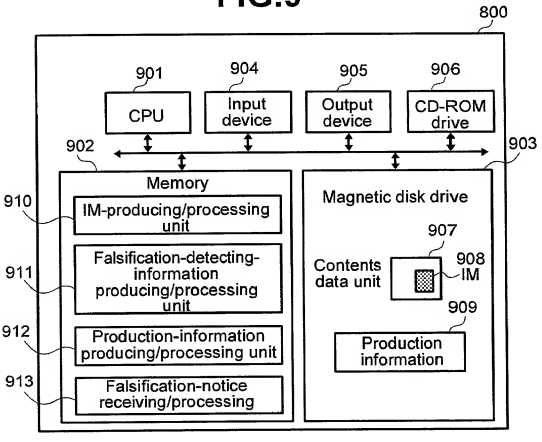

800
901
904
905
906
CPU
Input device
Output device
CD-ROM drive
902
903
Memory
910
IM-producing/processing unit
911
Falsification-detecting-information producing/processing unit
912
Production-information producing/processing unit
913
Falsification-notice receiving/processing
Magnetic disk drive
907
Contents data unit
908
IM
909
Production information

FIG.10

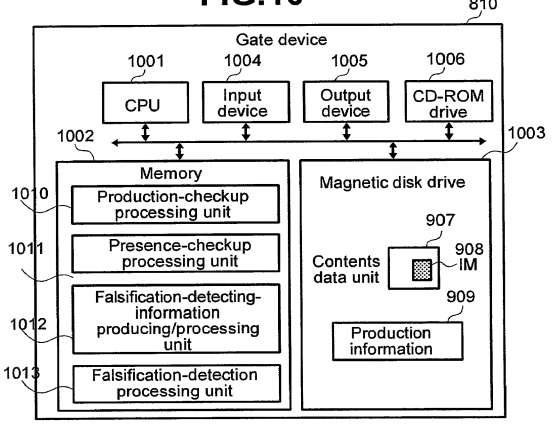

810
Gate device
1001
1004
1005
1006
CPU
Input device
Output device
CD-ROM drive
1002
1003
Memory
1010
Production-checkup processing unit
1011
Presence-checkup processing unit
1012
Falsification-detecting-information producing/processing unit
1013
Falsification-detection processing unit
Magnetic disk drive
907
Contents data unit
908
IM
909
Production information

FIG.11

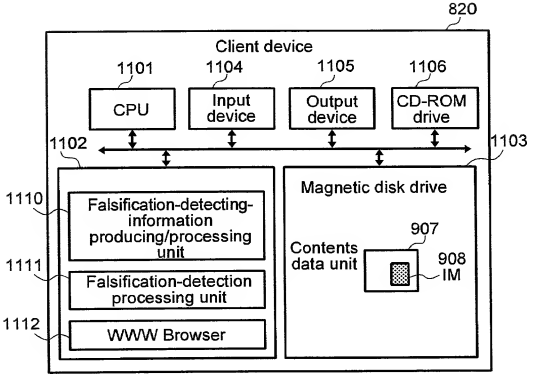

820
Client device
1101
1104
1105
1106
CPU
Input device
Output device
CD-ROM drive
1102
1103
1110
Falsification-detecting-information producing/processing unit
1111
Falsification-detection processing unit
1112
WWW Browser
Magnetic disk drive
907
Contents data unit
908
IM

FIG.12

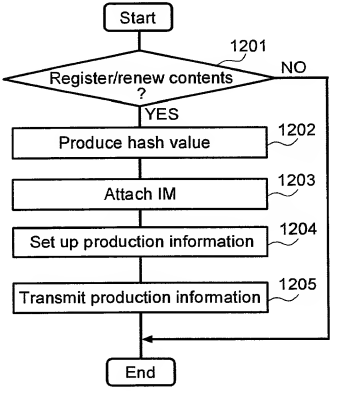

Start
1201
Register/renew contents ?
NO
YES
Produce hash value
1202
Attach IM
1203
Set up production information
1204
Transmit production information
1205
End

FIG.13

Filename	Date and time	...
index. html	2000/3/26 11:06	...
down¥content2. html	2000/3/26 11:16	...
:	:	...

FIG.14

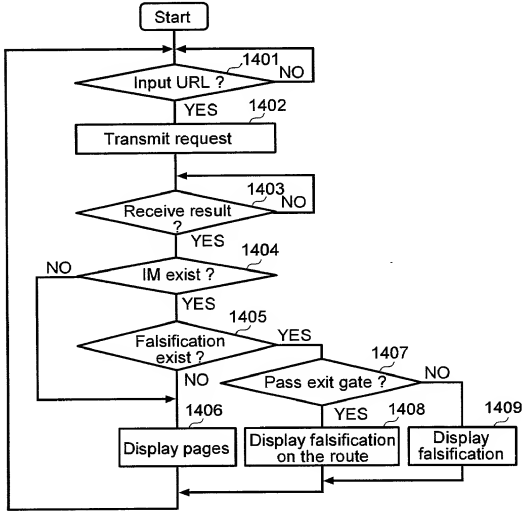


FIG.15

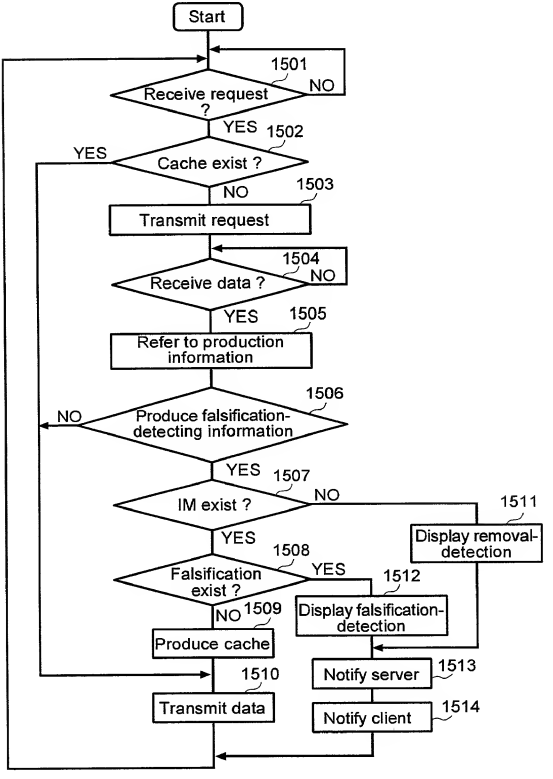
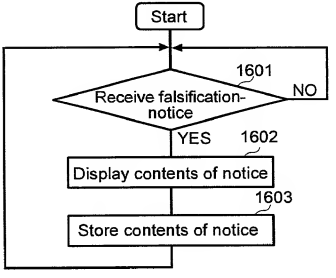

Start
1501
Receive request ?
NO
YES
1502
Cache exist ?
YES
NO
1503
Transmit request
1504
Receive data ?
NO
YES
1505
Refer to production information
1506
Produce falsification-detecting information
NO
YES
1507
IM exist ?
NO
1511
Display removal-detection
YES
1508
Falsification exist ?
YES
1512
Display falsification-detection
NO
1509
Produce cache
1510
Transmit data
1513
Notify server
1514
Notify client

FIG.16


Start
1601
Receive falsification-notice
NO
YES
1602
Display contents of notice
1603
Store contents of notice